WHAT HAPPENS WHEN COUNTRIES CANNOT PAY THEIR BANK LOANS? THE RENEGOTIATION PROCESS

Jack GUTTENTAG and Richard HERRING *

1. Introduction

Over the last decade the external debt of developing countries has increased substantially. The increase in debt has led to increased strains in their capacity to service debt when assessed by measures of their cash flow position in foreign exchange, such as the debt-service ratio (see table 1). Whether threats to their solvency are serious is a disputable issue, but there is no question regarding the seriousness of their liquidity problems. Since 1977 at least 15 developing countries have attempted to renegotiate their debts with international banks: Bolivia, Costa Rica, Cuba, Gabon, Jamaica, Liberia, Malawi, Nicaragua, Peru, Poland, Romania, Senegal, Sudan, Turkey, and Zaire. An increasing number of countries are experiencing debt servicing difficulties and amounts in arrears are cumulating. Most recently, Argentina, Brazil, and Mexico, the developing countries with the largest debts to international banks, have experienced debt crises.

The increase in the proportion of debt owed to commercial banks (see table 2) has aggravated the debt servicing burden of developing countries because debt to commercial banks is usually contracted at higher interest rates and shorter maturities than debt to official creditors. Moreover, the growth of lending by commercial banks has added to the difficulty of resolving debt servicing problems once they occur because it has vastly increased the number of participants whose interests must be represented in any negotiations for resolving the borrower’s difficulties. Thus, this growth of bank lending has increased the likelihood of debt crises and complicated their resolution.

* An earlier version of this paper, prepared for the National Science Foundation, was completed in February 1982, before the payment difficulties in Mexico, Argentina, and Brazil had broken the surface. Since the manner in which these serious problems arose was largely consistent with the inferences drawn from the original analysis, no attempt was made to revise the analysis to reflect these developments. The authors would like to thank David Dod at the Federal Reserve Board, and Charles Coltman, III and Richard Emigh at Philadelphia National Bank for helpful comments on the earlier draft. Of course, the authors alone are responsible for any remaining errors.
Table 1  
Non-oil developing countries: Debt service payments on long-term external debt, 1973–81 \(^a\) (Values in billions of U.S. dollars)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-OPEC developing countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt service payments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest</td>
<td>8.9</td>
<td>17.6</td>
<td>20.9</td>
<td>36.2</td>
<td>57.4</td>
<td>65.2</td>
<td>81.8</td>
<td>98.3</td>
</tr>
<tr>
<td>Amortization</td>
<td>2.9</td>
<td>5.9</td>
<td>7.5</td>
<td>10.6</td>
<td>20.5</td>
<td>29.9</td>
<td>39.5</td>
<td>49.7</td>
</tr>
<tr>
<td>Debt service as percent of exports</td>
<td>16.0</td>
<td>12.0</td>
<td>14.0</td>
<td>15.0</td>
<td>18.0</td>
<td>16.0</td>
<td>19.0</td>
<td>47.0</td>
</tr>
<tr>
<td>Interest</td>
<td>5.0</td>
<td>4.0</td>
<td>5.0</td>
<td>5.0</td>
<td>6.0</td>
<td>7.0</td>
<td>9.0</td>
<td>24.0</td>
</tr>
<tr>
<td>Amortization</td>
<td>10.0</td>
<td>8.0</td>
<td>9.0</td>
<td>10.0</td>
<td>12.0</td>
<td>9.0</td>
<td>10.0</td>
<td>23.0</td>
</tr>
</tbody>
</table>


\(^a\) Excludes data for the People's Republic of China prior to 1977.
Table 2
Non-oil developing countries: Distribution of debt by class of creditor, end of year, 1973–81 a (in percent)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total outstanding</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>debt of non-oil</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>developing countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To official creditors:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governments</td>
<td>50.4</td>
<td>49.2</td>
<td>47.1</td>
<td>46.4</td>
<td>45.1</td>
<td>43.2</td>
<td>41.8</td>
<td>42.1</td>
<td>42.3</td>
</tr>
<tr>
<td>International</td>
<td>32.9</td>
<td>36.6</td>
<td>34.3</td>
<td>33.5</td>
<td>31.8</td>
<td>29.9</td>
<td>28.5</td>
<td>28.7</td>
<td>28.5</td>
</tr>
<tr>
<td>institutions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To private creditors:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial institutions</td>
<td>12.5</td>
<td>12.6</td>
<td>12.7</td>
<td>12.9</td>
<td>13.3</td>
<td>13.3</td>
<td>13.2</td>
<td>13.4</td>
<td>13.7</td>
</tr>
<tr>
<td>Other private creditors</td>
<td>12.6</td>
<td>11.3</td>
<td>10.9</td>
<td>10.0</td>
<td>9.7</td>
<td>9.8</td>
<td>9.6</td>
<td>9.0</td>
<td>9.1</td>
</tr>
</tbody>
</table>

Source: World Bank, Debtor Reporting System; and Fund staff estimates and projections.

The renegotiation process begins when the borrower admits an inability to meet the terms of existing loan contracts and requests the forbearance of lenders. Prior to and during the renegotiation process arrears may cumulate, the lenders may threaten to declare the borrower in default, and the borrower may threaten to repudiate his debts, but the usual outcome of the renegotiation process is a rescheduling, a refinancing, or both. "Rescheduling" refers to a stretching out of principal repayments falling due within a specified interval, usually at a higher interest rate, often with a grace period during which no amortization payments are scheduled. On occasion, interest payments may also be rescheduled, in which case the postponed interest payments are added to the principal due at a later date. Normally the borrower will be required to pay a new fee and a higher spread over the base interest rate. In contrast, "refinancing" involves the issuance of a new loan to repay all the principal on various outstanding loans rather than just the amounts falling due over a specified interval. Some refinancings, which we shall term "market" refinancings, however, are not part of the renegotiation process but are initiated by the borrower in order to stretch out maturities, or to take advantage of an easing of market terms or an improvement in the market's evaluation of the borrower's creditworthiness. New lenders are usually involved in a market refinancing, but not in a refinancing that is part of the renegotiation process. Refinancings that are an outcome of a renegotiation process are made with the same group of lenders and typically involve a hardening of terms relative to the existing loan agreements.

Existing renegotiation procedures for dealing with the debt servicing problems of sovereign borrowers are ad hoc and growing concerns exist about their adequacy. In its recent opinion survey of international banks, the Group of Thirty [1] notes that more than half the respondents "... are unsure whether existing rescheduling arrangements are satisfactory and nearly 20% believe they are not". Before considering proposals for reform, however, it is important to understand how and why the current procedures have evolved. We begin with an analysis of the credit relationship with emphasis on the crucial role of uncertainty. We show why some of the traditional ways of limiting uncertainty in domestic transactions are ineffective in controlling risks in international transactions. This ineffectiveness, in turn, leads banks to rely more heavily on a short-leash approach to international lending, whereby loan maturities are kept short. Our analysis enables us to explain several characteristics of the current procedures and to identify some weaknesses. We conclude with an assessment of proposals to reform current procedures.
2. The credit relationship

2.1. Creditor protection techniques in domestic credit transactions

Uncertainty is a fundamental feature of most credit relationships. The creditor's advance of funds today in exchange for the borrower's promise of repayment in the future is subject to two sorts of uncertainty: (1) whether the borrower will be able to repay (economic hazard) and (2) whether the borrower will be willing to repay and to honor the other terms of the loan agreement (moral hazard). Within a country (especially within a developed country such as the United States), assessment of the ability of borrowers to repay is facilitated by easy access to information and familiarity with the economy and the culture. Such assessments usually are more expensive and less reliable in lending to foreign borrowers, although lenders can compensate by exercising greater care in selecting borrowers.

Moral hazard may arise in many ways ranging from actions taken by the borrower that might adversely affect his future capacity to service debt, to outright debt repudiation. Moral hazard is controlled domestically by the availability of information on "character", in some cases by cultural constraints on defaults, and most important, by the use of collateral, restrictive covenants, and contractual penalties backed up by the enforcement powers of the state. These means of controlling moral hazard are generally ineffective in international lending.

When borrowers and lenders are residents of the same country, the enforcement powers of the state are usually available to protect creditors against loss, while also protecting debtors against unreasonable demands of creditors. Most nations have developed procedures for determining whether a borrower can and should be compelled to repay and whether the borrower's assets should be liquidated or retained, for consolidating claims of all creditors, and for distributing the borrower's assets among the creditors. Sometimes the process may involve a forgiveness of some part of the borrower's debt and/or a stretching out of the maturity of his obligations.

The consolidation of claims against the debtor yields substantial efficiency benefits for both debtors and creditors. Without consolidation each creditor would have to make a separate solvency determination and attempt to attach the borrower's assets before other creditors. Simultaneous creditor actions would impose costs on all parties, including the debtor. Moreover, consolidation gives rise to economies in administrative and transactions costs and provides greater assurance of equal treatment to creditors. Bankruptcy procedures may also benefit creditors by allowing for a continuation of the debtor's business under court supervision in cases where the business is worth more alive than dead.
2.2. Limited efficacy of the standard techniques in international lending

When the credit relationship extends across national boundaries, the dangers of moral hazard multiply. The power of the creditor's government to compel foreign borrowers to abide by the terms of the loan contract ordinarily is very limited. Even if the power exists, it is very seldom that the creditor's government, other interested governments, or international organizations can be induced to impose sanctions on the borrower on behalf of a private creditor.

Bankruptcy procedures in the creditor's home country, furthermore, are usually of no assistance when debtors are in a foreign jurisdiction. The creditors may be able to attach any of the debtor's assets that are held outside of the debtor's country, but the bulk of these assets are usually within the debtor's country and, therefore, probably outside the legal reach of the creditor. This is especially likely if the government is either the debtor or has guaranteed the debt, an arrangement which is quite common today with loans to many developing countries. Even where transactions are strictly private, the debtor's government will be involved if the debtor's problems are connected in any way with the availability of foreign exchange. The problems considered in this article thus apply whenever the foreign government is either the borrower, the guarantor, or controls the supply of foreign exchange available for servicing foreign debts. The risk that debt service payments will be delayed, reduced or renounced due to the exercise of sovereign power in the borrowing country is sometimes termed "transfer risk".

2.3. Creditor protection techniques in international credit transactions

2.3.1. The threat of withholding credit and legal harassment

Cross-border lenders are not without means to punish borrowers who do not pay. Where lenders are governments, the willingness of sovereign borrowers to repay is affected by political factors, including implicit or explicit sanctions by the lending sovereigns or withholding of other benefits. Private lenders can attempt to compel the sovereign to repay by threatening to withhold further credit and/or by threatening perpetual legal harassment that would wholly or partly shut the sovereign out of the world trading system. Such power has worked remarkably well in the period since World War II. With the partial exception of Cuba, Ghana (briefly), and North Korea, no government has repudiated its debts. This has proven true even in instances where the threat to withhold further credit would seem to have limited power. For example, countries that have borrowed largely to service past debt have continued to honor those debts. Intensely nationalist new regimes that regarded foreign banks as collaborators of reviled predecessor governments, nevertheless have continued to service the debts contracted by those governments. Countries with such limited development prospects that they are
unlikely to get substantial new loans even if they repay promptly continue to service their debts.

On close inspection, the threat to constrain the sovereign's ability to run current account deficits by withdrawing credit is less potent than the threat to deny participation in the Western trading system. Even if a country does not expect to be in a debtor position with regard to foreign banks, the country may nevertheless find it essential to have balances at foreign banks in order to finance trade flows, and any such balances are subject to attachment by creditors. Thus, depriving a borrower of access to international banking facilities is tantamount to depriving that borrower of participation in the international financial system. Without access to international deposit and credit facilities a sovereign is reduced to international barter or a shift to the COMECON trading system.

It should be noted that the effectiveness of these sanctions depends on the degree of coordination between commercial banks and their governments so that, at the extreme, the recalcitrant debtor will neither obtain fresh credits nor have access to foreign balances to make payments. The likelihood of a common front is enhanced by the natural tendency to distrust the promises of any borrower who has failed to keep his promises in the past and by two institutional characteristics. First, banks generally organize international syndicates, at least in part, so that the borrower's failure to repay will alienate banks (and, it is hoped, governments where such banks are headquartered) in several different countries, and so that the repayment prospects for the loan are not entirely dependent on the maintenance of good relations between the borrower and any one country. In addition, cross-default clauses make it difficult for the borrower to engage in selective defaults.

The risks of moral hazard in sovereign lending by commercial banks remain very serious. First, as international banking becomes increasingly competitive, the united front necessary to deny debtors who have repudiated access to international banking facilities could easily break down. The Iranian experience showed that cross-default clauses are not automatically invoked. Furthermore, it is not difficult to imagine that some banks could perceive attractive profit opportunities in dealing with a country that is shunned by other banks but has shed its foreign debt, and that the lending bank's government might have such an overriding interest in the borrowing country that it would not permit the borrower's assets to be attached.

Although no important borrowing countries have attempted to repudiate their debt, this does not necessarily mean that they will not do so in the future. The benefits of repudiation depend on the burden of debt. If this burden keeps rising, the temptation to repudiate will likewise increase.

Finally, even if outright repudiation can be avoided, banks have very limited means of protecting themselves against less extreme forms of moral hazard. For example, sovereign debtors can jeopardize the creditor's chance for
repayment by incurring large additional debts or by pursuing policies that are inconsistent with balance-of-payments equilibrium. Often the policies of sovereign debtors that are politically most attractive are the very ones that endanger their capacity to repay their foreign loans. In contrast, the policies that the sovereign's creditors prefer would endanger the tenure of the existing government. Governments faced with a choice between jeopardizing their future capacity to repay foreign debt and immediately endangering their own tenure in office will usually opt for the former.

2.3.2. Keeping maturities short

Loans subject to transfer risk [2] are made with the implicit assumption that macroeconomic policy will be effectively managed so that the country will have sufficient foreign exchange to service its debts. Although this assumption has, on occasion, been made an explicit part of the loan agreement, it is almost always left unstated. There is little point in drawing up restrictive covenants on a borrowing country's macroeconomic policy, since commercial banks are in no position to enforce such covenants, and the explicit statement of such conditions is likely to be viewed as an offensive intrusion on the borrower's economic sovereignty.

Instead of imposing restrictive covenants, banks attempt to influence the borrower's macroeconomic policies by requiring the sovereign to renegotiate his debt at short intervals [3]. This is the essence of the short-leash approach. Limiting the maturity of a loan is a traditional way of limiting risks. To the extent that the creditor can forecast the near term more confidently than the long term, a short maturity limits his exposure to economic hazards. The shorter the period, the less the probability that an adverse development will occur. In international lending the short-leash approach is even more important as a means of limiting the creditor's exposure to moral hazard – especially the risk that actions by the sovereign debtor after the loan is drawn down will injure future capacity to repay. Sovereign borrowers will be inhibited from taking such actions if they must renegotiate the loan after the creditor has observed their behavior and before they have reaped full advantage from their action. As Citibank notes in its 1981 Annual Report: "... country risk from foreign currency lending is reduced as the length of the obligation decreases, since shorter maturities permit adjustments in exposure as balance of payments or political conditions change".

The short-leash approach, however, has consequences that weaken the international banking system. First, the short-leash strategy may lead to false confidence and make some creditors feel safer than they actually are. The approach is subject to the fallacy of composition: an effective risk-control device for one creditor may prove to be ineffective if all creditors try to withdraw their loans at once. Banks typically fail to take the actions of other banks into account because most banks believe they have better information
than other banks, and short maturities do protect any creditor with superior information who can run before other creditors perceive that the situation has changed. Not all banks can be correct in this perception, however, and the false security of at least some makes the overall credit relationship more vulnerable to crisis.

Second, under the short-leash approach, debt repayment schedules are related less to the capacity of the borrower to repay than to the need to influence the borrower's willingness to repay. Loan maturities tend to be shorter than those that are optimal from the standpoint of repayment capacity.

A third consequence of the short-leash approach, as discussed below, is that debt crises become more difficult to resolve once they do occur.

3. Risk management and debt crises

Current procedures for resolving debt servicing problems between sovereign debtors and commercial banks are ad hoc and unsatisfactory in many respects.

3.1. Developing a common position among banks

Several factors make it difficult for banks faced with a major sovereign debt repayment problem to develop a common bargaining strategy. This can lead to substantial delays in dealing with these problems, and contributes to uncertainty about the outcome.

The large number of banks involved may itself be a major difficulty. Recent negotiations with Turkey, Poland, Romania, and Mexico have each involved several hundred banks and it has taken a substantial amount of time even to identify the banks involved. This problem may be mitigated somewhat in practice because the more heavily exposed banks carry the most weight in renegotiations. For example, in early 1982 Romania reached an agreement with its nine most heavily exposed creditors which was then imposed on 200 other Western banks, the outrage of those banks notwithstanding [4]. On the surface it might appear that banks with relatively small exposure to the troubled debtor could exercise significant leverage because they could write off their share of the country's debt and therefore might be able to make a credible threat to declare a default. In practice this threat has proven to be ineffective, largely because of sanctions that the more heavily exposed banks could apply against renegade banks in interbank markets and because the more heavily exposed banks could strike a deal with the borrower that would leave the renegade banks with nothing.

Furthermore, the predisposition of banks is to behave competitively. Although they may form transitory coalitions to participate in syndicated loans, each bank is pursuing its own objectives. Indeed, the short-leash approach
implicitly relies on the assumption that each bank can detect a pending debt servicing problem before its competitors and, in effect, shed its exposure on other banks. Moreover, competitiveness is in itself a substantial obstacle to refinancing the borrower’s outstanding obligations because no bank, whether it be an official creditor, a grantor of aid, or an international agency, wishes to be cast in the position of bailing out banks who withdraw their credit lines.

3.2. Debt crises and balance-of-payments crises

The short-leash strategy increases the likelihood that a balance-of-payments crisis will lead to a debt crisis. A balance-of-payments crisis may be defined as a current account deficit of such magnitude that it requires a sharp shift in government policies to restore equilibrium [5]. Not all balance-of-payments crises lead to an interruption in debt service payments because by shifting its policies appropriately, a government may maintain its credit-worthiness, as Brazil did in late 1980.

Unfortunately, the requisite shift in policy will almost always be quite painful, both economically and politically. In order to reduce the current account deficit, the government must usually reduce aggregate demand relative to output; the more pleasant option of increasing output relative to aggregate demand is seldom feasible, especially within a short time span. Thus, the requisite policy shifts are almost always restrictive. It is not surprising that governments frequently resist adjustment pressures. The price of resistance, however, is likely to be a debt crisis: a situation where the government cannot roll over its external debt. When a government’s policies do not sustain the confidence of creditors, foreign creditors will not roll over their claims, domestic residents may shift funds abroad, and the impact of the current account deficit on foreign exchange reserves is exacerbated by net capital outflows.

A current account deficit arising from any source that is accompanied by an adverse shift in expectations regarding the government’s policies can thus lead to a “run”, an unwillingness of holders of maturing obligations to roll them over. The larger the volume of such obligations coming due in any period, the larger the magnitude of any potential run. Thus, the more “conservative” banks are in protecting themselves individually against moral hazard by keeping maturities short, the more likely that a balance-of-payments deficit (which in some cases might be correctable in time if capital outflows could be avoided) will lead to a debt crisis.

3.3. Debt crises and initiation of renegotiations

Banks are unwilling to enter into debt renegotiations until a debt crisis occurs, because they would prefer that the country respond to market pressures
to change its policies and because they would rather have a country refinance its maturing obligations than renegotiate them.

Banks prefer a market refinancing to renegotiation for several reasons.

(1) An orderly refinancing enables the borrower to honor the terms of the loan agreement. Banks sometimes stress that this helps sustain the creditworthiness of the borrower, but it is also helpful in maintaining confidence in banks. A failure to achieve an orderly refinancing raises questions about the efficacy of market mechanisms for influencing the borrower's policies and, therefore, casts doubt on the value of the bank's claims on the borrower.

(2) The informal bargaining between a country and the impersonal market that occurs in a market refinancing avoids the explicit and awkward intrusion on the economic sovereignty of the borrower that arises in debt renegotiations.

(3) A refinancing generates new fees for participating banks, whereas a renegotiation entails substantial transactions costs and managerial time because of heightened uncertainty [6].

Market refinancings are not always an adequate substitute for formal debt renegotiations, however. There may be a greater probability that the borrower's adjustment program will fail because the bargaining over the borrower's policies is less explicit, the information base is less complete, and there is no effective mechanism for monitoring the performance of the country. If the program fails, the consequent debt renegotiation will be even more complicated than if it had been conducted earlier. Amounts to be rescheduled will have increased, as will the burden of balance-of-payments adjustment. (This seems particularly true of the refinancing of the Peruvian external debt in 1976, the refinancings of the Polish debt over the last part of the seventies, and the Mexican debt crisis in 1982.)

The refinancing option may present another problem in the extreme case of a country with such enormous indebtedness to banks that its failure to service its debts could jeopardize the solvency of several of its bank creditors. In this case, the banks will have lost all power to influence the borrower's policies, and the refinancing may be little more than an attempt to obscure the borrower's difficulties. In addition to the misallocation of financial resources, this situation is particularly threatening to the stability of the banking system. Heavily exposed banks will take on even larger exposures (a) as banks that could afford to write off the loan decline to roll over their claims on the troubled country, and (b) as claims of increasingly doubtful value become more concentrated in banks that were already overexposed. We have probably not yet observed such an instance, but banks and bank supervisors must be aware of the risk.

3.4. Absence of a forgiveness option

In dealing with domestic firms that are having debt servicing difficulties, banks may agree to forgive a portion of the firm's debt if this is necessary for
its continuance and if continuance of the firm would yield the bank a higher return than its liquidation. Although countries are not liquidated, it is conceivable that renegotiations that include forgiveness of sovereign debt would yield a higher return than renegotiation without forgiveness. Vulnerability to moral hazard, however, makes banks resistant to proposals to forgive sovereign debt. Although in principle it might seem desirable to treat debt servicing problems differently when they are due to exogenous factors than when they are due to factors that should have been under the borrower's control, in practice the distinction is difficult to draw. A policy of forgiving debt when the cause of a debt crisis is some factor beyond a country's control might reduce the government's incentives for dealing with the problem as effectively as possible. Moreover, if foregiveness were to become a standard option, spreads would rise to provide creditors with ex ante compensation for such expected losses.

3.5. Shortness of consolidation period

Banks prefer short consolidation periods even when it is clear that the debtor's problems will extend beyond the period. This is another reflection of the short-leash approach to managing uncertainty. The necessity for conducting repeated renegotiations with a debtor is part of the creditor's means of limiting moral hazard, providing greater assurances that the debtor will not use his freedom from the burden of debt service payments to pursue grandiose and wasteful policies, and avoid balance-of-payments adjustment. The short-leash approach also may aim to make debt relief as irksome as possible in order to deter the borrower and others from seeking debt relief. The short-leash approach imposes significant costs on the debtor, however. The debtor's uncertainty about the availability of financial resources may inhibit the formulation of long-term plans and retard the return to sustainable economic growth. Short-term palliatives may be favored over long-term structural change. Moreover, the necessity of repeatedly renegotiating debts may divert scarce managerial and professional talent from more productive activities. A less intrusive method of controlling moral hazard could better the situation of both creditors and debtors. To some extent, the International Monetary Fund (IMF) serves this function.

3.6. Commercial banks and the IMF

A debt crisis represents a failure in the ability of banks to influence the macroeconomic policies of the borrower. As a consequence banks usually insist on external supervision of the debtor country's policies. This role is usually assumed by the IMF, particularly because the Fund may already have entered into negotiation with the country regarding its balance-of-payments crisis. If the
borrower has not already concluded a standby agreement with the Fund, the banks will usually make such an agreement a precondition for debt relief. Although the financial resources which the Fund provides are a welcome contribution to the solution of the debtor's problems, the principal importance of the Fund's involvement is in the conditionality which accompanies its lending in the upper credit trenches, Supplementary Financing Facility, and Extended Fund Facility. The Fund plays the vital role of assessing the borrower's needs, developing a stabilization program in consultation with the borrower that will re-establish the borrower's creditworthiness, and monitoring the country's performance under the stabilization program.

Banks are ill-equipped to establish formal conditionality over sovereign borrowing. They lack both legitimacy and expertise. In contrast, the IMF has substantial expertise in designing and implementing stabilization programs and, as an international organization, is well suited for establishing conditionality; however, its financial resources are limited. There would seem to be substantial potential gains from closer cooperation between the IMF and commercial banks, but there are also substantial difficulties in formalizing a mode of cooperation.

The relationship between private banks and the IMF is complex. Before the onset of a debt crisis, the borrower is likely to perceive bank lending as a substitute for credit from the Fund. Indeed, sovereign borrowers would be likely to oppose greater cooperation between the Fund and commercial banks at this stage because it would limit their options. Although Fund credit is cheaper in financial terms, the perceived social and political cost of submitting to the Fund's conditionality are such that most countries continue to borrow from commercial banks at higher rates so long as they can. (This provides strong presumptive evidence that the conditionality imposed by the banks is much weaker than that imposed by the Fund.) In most cases reliance on bank financing is entirely appropriate, and in view of the Fund's limited lending capacity, necessary; but, in the case of countries that experience debt crises, it is clear - ex post - that recourse to the Fund was delayed unduly. By continuing to underwrite policies that were inconsistent with long-term equilibrium, commercial banks have, in effect, exacerbated the adjustment problem. The larger the adjustment problem, the sharper the necessary shift in policies and, consequently, the greater the strain placed on the social and political structure of the borrowing country and on the international financial system.

Such strains could be reduced if borrowers were induced to turn to the Fund before their balance-of-payments problems reach crisis proportions. Borrowers could be induced to turn to the Fund earlier if the Fund's conditionality were softened, but such a softening would make recourse to the Fund less valuable in preventing and correcting debt servicing difficulties. Alternatively, commercial banks would be more likely to send borrowers to the Fund
sooner if they perceived greater expected losses from a debt crisis, which would be the case if foreign loans were marked to market [7].

With the onset of a debt crisis, the relationship between the Fund and the commercial banks necessarily becomes more cooperative. The commercial banks must rely on the Fund for information about the debtor's condition and for the formulation of a realistic stabilization policy. The Fund, in turn, must rely on the commercial banks to provide an appropriate amount of financing during the stabilization program [8]. If commercial banks provide too much financing, the borrower will find it unnecessary to meet the conditions established for drawing under the IMF facilities, with the result that little adjustment will take place. (This may have been the case with the IMF stabilization programs for Great Britain, Mexico, and Italy in the mid-seventies.) If commercial banks provide too little financing or reduce their exposure, the borrower may be forced to undertake much more painful contractions of aggregate demand.

Although there is an informal flow of information between commercial banks and the Fund, the flow is somewhat inhibited. On the part of the Fund, there is a reluctance to disclose any information that is not approved by the member government, lest an unauthorized disclosure jeopardize future flows of information from the member country. Banks, on the other hand, are reluctant to signal their intentions regarding future lending to the borrower, in part because they are not certain that the IMF stabilization program will work and wish to maintain their freedom to withdraw credit. In addition, they wish to maintain competitive flexibility. A bank that correctly perceives the turning point in a country's recovery program before its competitors may be able to make substantial profits by offering financing when a country must pay higher spreads, than later, when it is clear to all that the stabilization plan is working.

Although the absence of lending commitments from commercial banks heightens the uncertainty in launching a stabilization program, it may also have a salutary effect. The necessity of winning the confidence of the market counterbalances the political pressures on the Fund to err on the side of requiring too little conditionality. On the other hand, the market pressure to show quick results may force a country to choose a suboptimal adjustment path with consequent heavy costs in reduced growth, greater unemployment, and heightened social and political tensions. The appropriateness and effectiveness of IMF stabilization programs are the subject of considerable controversy. A better understanding of how they contribute to the adjustment process could reduce uncertainties in the post renegotiation phase.

4. The impact of debt renegotiations on the value of bank loans

Although information is scant, it is often asserted that banks have not lost money in renegotiating sovereign debt. It is argued that the present value of
the schedule of payments when the loan agreement was signed is no greater than the present value of the schedule of payments after the renegotiation agreement. Even if this assertion is true, however, commercial banks undoubtedly suffer an economic loss in a debt crisis. The loss may be concealed by the fact that, inasmuch as nations do not go out of business, and market quotations are not available on foreign loans, balance sheet values are not ordinarily adjusted to reflect increased risk following a debt crisis [9].

It is necessary to treat the schedule of debt service payments as a stream of risky cash flows rather than a certain stream of payments. The present value of the bank's claim on the borrower can be summarized as:

$$PV = \sum_{t=1}^{N} \left[ \frac{E(C_t) - A_t}{D_t} \right]$$

where $E(C_t)$ [10] is the expected value of the scheduled cash flows, $C_t$, in period $t$; $A_t$ is the amount the bank would be willing to pay to be certain of the cash flow in period $t$. Thus, the difference, $E(C_t) - A_t$, is the certainty equivalent cash flow; $D_t$ is the risk-free discount factor – the future value in period $t$ of one dollar invested at the risk-free rate.

It is instructive to compare the value of the loan at three different points: (1) when the original loan agreement was signed, (2) when the debt crisis began, and (3) when the renegotiation agreement was signed. The present value of the loan is likely to have been highest when the original loan agreement was signed. (A comparison of the rate of return the bank would achieve if the borrower met all scheduled debt service payments, with the rate of return on a risk-free asset, would indicate the implicit default premium.) At the start of the debt crisis, even the near-term debt service payments are in doubt and the present value of the loan is likely to be at its lowest point. After the loan has been successfully renegotiated, the present value of the loan will rise, but it is likely to have a lower present value than when the original loan agreement was signed.

The renegotiation will have two opposite effects on expectations of future cash flows. First, the shift in government policies and the rescheduling of debt service payments to correspond more closely to the borrower's anticipated cash flows will increase the probability that the borrower will be able to meet the scheduled debt service payments. This factor is offset to some extent, however, by knowledge that the borrower has failed to honor past promises to make payments. In comparison with the original evaluation, after the renegotiation the expected values of cash flows are likely to be lower in comparison to contractual values of debt service payments, and the certainty adjustment factors are likely to be larger since the expected values are undoubtedly subject to greater uncertainty. These differences are likely to be larger the longer the grace period and the longer the extension of maturities, because distant cash
flows are vulnerable to a greater number of unfavorable events than near-term cash flows.

5. A proposal for valuing foreign loans at the market

A requirement that foreign bank loans be carried on the books at true market value would tend to offset some of the adverse consequences of the short-leash strategy. Such a change would cause a sharp reassessment of the risks in foreign lending. Market spreads on most country loans over the past several years indicate that, except during periods of unusual stress, banks expect these loans to be virtually risk-free. In part this may reflect the fact that under current procedures write-offs can be delayed more or less indefinitely because there is always some chance that the debtor may be able to meet the rescheduled payments. If these loans are valued as the market value of a stream of risky payments, however, write-offs will occur as expectations regarding repayment prospects change (and as certainty-adjustment factors and the risk-free term structure change). Spreads will rise to reflect the perceived risk that payments may not be made on schedule.

To the extent that past debt crises have been aggravated because banks have underwritten policies in the debtor country that were inconsistent with external equilibrium, debt crises are likely to be less severe. Countries will be forced to change their policies earlier, whether in response to market pressures or an IMF stabilization program.

In the event of a debt crisis, banks would be likely to adopt a different negotiating position, because the value of each loan will reflect its repayment prospects, and there would be no point in negotiating a repayment schedule that the borrower is unlikely to be able to meet. Indeed, since interruptions in debt servicing raise the risk of repudiation which would further depress market values, the banks would have strong incentives to negotiate a schedule that reflected the borrower's capacity to repay.

Market valuations also would tend to reduce excessive concentration of risk exposure of individual banks to specific countries, especially if they were accompanied by public disclosure of such exposure. It would also stimulate innovations in financing development that would accommodate the need to spread risks, such as the development of secondary markets in foreign loans or an increase in bond financing or direct investment flows. The world-wide allocation of resources also would be improved because banks would be focusing on risk-adjusted rates of return.

In contrast, in the absence of innovations in bond financing, direct investment, or official lending, such a change would probably increase the cost and reduce the volume of loans to foreign borrowers. In addition, major shocks to confidence that cause abrupt declines in market values could affect the volume
of new foreign lending as much as or perhaps even more than under a system where balance sheets are revalued only when loans are charged off. A market value system would help avoid crises but may not be optimal in a crisis-prone world.

The main obstacle in implementing such a change is finding a source or establishing a procedure for valuing international loans. If the valuation procedure must involve administrative determinations, it is probably a hopeless task. Henry Wallich has examined the closely-related problem of determining a regulatory policy toward recognition of losses on international loans. He concludes that it is very difficult to estimate the ultimate loss for an international loan because of uncertainties over the policies that the debtor will pursue, the duration of the default, and prospects for the world economy [11]. The problem is further complicated by inevitable conflicts in judgment between regulatory authorities in different countries. Conflicts arise now regarding whether or when to classify loans to a given country as "lose", but they are infrequent and apply only to loans of a given country in distress. Valuation must be a continuing process, however, and it must cover all international loans, which means that the possibility of obtaining international consensus is nil.

What is needed are objective market valuations that would transcend national boundaries and avoid the need for administrative determinations (except for the determination to use market values). We have proposed elsewhere to develop a secondary market in international loans for the purpose of facilitating reductions in excessive concentrations of country risk exposure. Such markets would serve the equally important purpose of providing valuation data.

6. An evaluation of other proposals for reform

Proposals for the reform of the renegotiation process have addressed the information base, the initiation of the process, the objectives of the renegotiation, and the institutional arrangements. We shall consider each in turn.

Inadequate information may contribute to a debt crisis and undoubtedly impedes a speedy resolution. Since a country's outstanding stock of indebtedness is an important element in an evaluation of its credit-worthiness, inadequate information gives rise to the risk of a debt crisis by miscalculation. Moreover, before a realistic repayment schedule can be drawn up, it is necessary to know the magnitude of the repayments that must be rescheduled. The provision of this sort of information is an international public good. In the absence of government assistance, the amount of information available is likely to be suboptimal. Since no private entity could appropriate the benefits that
accrue to users of such information, they will lack sufficient incentives to produce it.

Anecdotal evidence suggests that on several occasions both creditors and debtor governments have been surprised by the magnitude of a country’s external debt, and that renegotiations have been subjected to substantial delays while information is amassed. Sudan reputedly sent out questionnaires to determine how much it owed to banks, and Poland is reported to have hired an international accounting firm to provide information regarding its debt servicing responsibilities. There have been substantial improvements in the information base over the past decade [12]. The creditor reporting system of the OECD Development Assistance Committee and the debtor reporting system of the World Bank have been expanded to cover a wider range of countries. Nevertheless, there are still substantial delays in reporting and important gaps in information regarding debt to non-banks with original maturity of less than one year and long-term debt that is not guaranteed by the government.

The situation with regard to bank claims on developing countries has improved remarkably with the introduction of two reporting systems by the Bank for International Settlements (BIS). The BIS quarterly survey of international bank claims and liabilities is not well-suited for prudential questions. It is based on balance-of-payments data, and therefore presents information classified by the domicile of the bank office, not the consolidated position of the headquarters banks nor even of the banks headquartered in particular countries. The BIS semi-annual survey of the maturity of international bank-lending is considerably more useful. It presents aggregated external positions of banks located in the Group of Ten countries, Switzerland, Austria, Denmark, and Ireland; and of many of their affiliates domiciled in other countries. Undisbursed external credit commitments are also tabulated for a smaller group of reporting countries. As more members of the BIS collect exposure data on a worldwide basis for banks headquartered in their countries, the usefulness of the data should improve. But at present it is not possible to identify the world-wide activities of banks headquartered outside the United States and the United Kingdom. Moreover, the coverage of some affiliates in offshore banking centers is incomplete and the data are not adjusted for guarantees.

Proposals to improve the information base should be non-controversial because better quality information on a more timely basis can make both debtors and creditors better off. There remains, however, the awkward question of identifying which international organization should have the responsibility for integrating the existing sources of information and filling in the gaps that result from differing institutional purposes. In addition, one should not underestimate the difficulty in collecting comparable, meaningful data from hundreds of institutions that have located in scores of political jurisdictions, sometimes for the purpose of avoiding disclosure of banking data.
On the other hand, the initiation of the renegotiation process is controversial. The developing countries have argued that the debtor country should be able to request a reorganization of its external debt whenever "it believes it has a debt problem or whenever it has a development problem of which debt is an element" [13]. The developing countries would like to obtain a rescheduling before a liquidity crisis occurs, both in order to prevent the interruption of development efforts and sharp policy shifts, and in order to enhance their bargaining position. Under the present system, in essence, a country can obtain a rescheduling of its debt only by threatening to undertake a unilateral rescheduling by letting arrears accumulate [14].

As we have noted, banks prefer that borrowers refinance when confronted with a prospective debt problem. We have argued that failure to achieve a refinancing is symptomatic of a dispute between a country and its creditors over its policies. From this perspective, the debt crisis may be interpreted as a mechanism for resolving a dispute over the borrower's policies. It follows that the appropriate remedy for a country that wants to avoid a debt crisis is to change its policies earlier and undertake a market refinancing. This leaves open the more fundamental question of whether there might not be a way of resolving such disputes that is less threatening to international relations and the international financial system than the brinkmanship involved in a debt crisis. One such remedy would be to have the borrower consult with the IMF at an earlier stage. But, as noted above, there are substantial obstacles to implementing such a change [15].

Any requirement that banks reschedule at the initiative of the borrower would undoubtedly raise the cost of credit because banks would have to be compensated for the opportunity cost in extending the loan involuntarily. If it is possible to identify the countries most likely to demand a rescheduling, those countries would bear most of the costs by paying higher spreads. To the extent that it is not possible to make such an identification, the burden of higher spreads would be borne by all countries.

There is also a dispute over the objectives of the renegotiation. The developing countries assert that currently renegotiations focus on the objective of maintaining the flow of debt service payments to the exclusion of development objectives. They insist that some minimum growth of per capita output should be given equal priority with the resumption of debt service payments [16].

Creditors argue that the best way to restore growth is to restore the borrower's credit-worthiness as soon as possible. This dispute is parallel to the dispute over IMF stabilization programs and at root its solution depends on the optimal balance between financing and adjustment.

The basic problem of judging how much the borrower can afford to pay is common to all work-out situations. In the case of a country, the judgment requires complete information regarding foreign exchange receipts and ex-
penditures. Inevitably there is much uncertainty over future flows and, often because of data limitations, over current flows as well. Moreover, the flows depend on government policies that operate with long and uncertain lags. In view of the moral hazard that creditors face in dealing with a sovereign, there is undoubtedly a tendency for creditors to demand more rapid repayment than would seem warranted by projections of the country's foreign exchange flows. They are constrained, however, by the knowledge that excessively harsh terms can be counterproductive. An austerity program that leads to political chaos(16,13),(987,991) will delay the country's financial rehabilitation and could raise the threat of debt repudiation. In evaluating the burden of a stabilization program, creditors also face a grave problem of moral hazard, since governments have some capacity to influence the acceptability of austerity programs.

To some extent this dispute could be resolved by better research on the trade-off between adjustment and financing. A conflict over terms, however, is intrinsic to any restructuring. Borrowers, because of the constraints on their economic sovereignty, will feel that terms are too harsh. Lenders, because of their concern over moral hazard, will feel that repayment is too slow. Moreover, they want to make the terms somewhat onerous in order to discourage additional renegotiations. Any attempt to require that all renegotiations set repayment schedules that permit the borrower to grow at some specified rate per capita are likely to raise the cost of borrowing substantially because it would be very difficult to anticipate the costs of such a commitment.

There has also been controversy over the institutional arrangements for debt renegotiations. To some extent this is another facet of the dispute over objectives. Concern over institutional arrangements also extends to procedures. The developing countries would prefer a multilateral forum in which their total debt problems could be viewed in the context of their development problems [17]. Private creditors, in contrast, prefer to deal with private debt problems in isolation, in an ad hoc manner.

The problem with the current set of arrangements is that they are cumbersome to deploy and do not enable debtors and creditors to achieve the benefits of consolidation of the sovereign's debt. In essence, the debtor is forced to conduct three sets of negotiations simultaneously - with official creditors, with commercial banks, and with the IMF. This is inevitably awkward because in order for the final package to make sense the three agreements will have to be made consistent. Moreover, progress is made difficult by the concern of each of the participants over equal treatment. Neither the IMF nor official creditors wish to be viewed as bailing out the commercial banks, and the commercial banks do not wish to take on the burdens of official institutions. These are legitimate interests that need to be protected, but they could be equally well protected in one negotiation that recognizes differences among classes of creditors, as is traditional in domestic bankruptcy proceedings.

There may also be advantages in identifying some institution as the locus of
debt renegotiations. The Fund would be a logical choice because of its usual involvement in stabilization policies. The development of institutional expertise in handling debt crises could facilitate a quicker resolution of such problems. These institutional changes are attractive because they hold the promise of making both borrowers and lenders better off.

7. Conclusion

As the number of debt crises mounts, the probability increases that the delays and brinkmanship inherent in existing arrangements will overload the system. If a very large debtor is involved, failure to reach a timely agreement could cause a sharp revaluation of the riskiness of lending to developing countries on the part of banks, bank depositors, shareholders, and regulators. At a minimum, such a reaction would lead to a substantial increase in the spreads on loans to developing countries and a consequent increase in the burden of servicing external debt. There is a risk, however, that the market response would be much stronger and more far-ranging. Implicit risk premiums might rise so high that developing countries would be unable to roll-over their indebtedness at any spread and many countries who would have had no difficulty in servicing their debts under favorable market conditions would be forced to interrupt debt service payments. Moreover, the calculation of the costs and benefits of debt repudiation would shift sharply in favor of repudiation in such an environment. Under such circumstances, confidence would be undermined in banks that have large exposures to developing countries. And because such banks have significant positions in the interbank markets, confidence might also be undermined in banks that are suspected of having large claims on the exposed banks [18]. The consequences of such a reaction are so grave that the development of less stressful procedures for resolving debt crises is an urgent priority for public policy.
Notes


[2] Unless a foreign borrower has provided extra-territorial security, all foreign lending not denominated in the borrower's own currency is subject to transfer risk. Even if the borrowed funds were productively employed so that they increase the local currency profits of a private borrower or the local currency tax revenues of a government borrower, poor productivity or mismanagement in other sectors of the economy can reduce net earnings of foreign exchange and cause an interruption in debt service payments.

[3] Of course, this is not the only motivation for short loan maturities. Trade finance, for example, is traditionally short term because each transaction is considered to be self-liquidating over a short interval. Nevertheless, even the value of trade credits can be jeopardized by a country's loss of credit-worthiness.


[5] The deficit may have increased for any number of reasons. It may be the consequence of an excessive expansion of aggregate demand, a shortfall of exports due to an interruption of domestic supplies, a decline in foreign demand for exports, or a surge in import prices. Moreover, it is possible that the deficit may not have increased, but instead the willingness of creditors to finance a given deficit may have declined due to a shift in expectations regarding the country's prospects. Whatever the cause, whether it be due to factors exogenous or endogenous to the country, the deficit is not sustainable in the sense that it requires more financing than creditors are willing to provide on an ongoing basis.

[6] These costs of reschedulings are becoming increasingly worrisome to banks. The report of a recent opinion survey by the Group of Thirty notes, supra note 1, at iv, that: "More than half the respondents think the indirect costs of rescheduling could become a 'significant' concern in the future."

[7] See Section 5 infra for an analysis of the implications of adjusting balance sheets to reflect true market values of claims on troubled debtors.

[8] Recently, in developing stabilization programs for Mexico, Argentina, and Brazil, the IMF has insisted on explicit coordination. For example, the Managing Director of the IMF is reported to have insisted that commercial banks roll over $20 billion of Mexican credits maturing between August 1982 and the end of 1984 and also provide an additional $5 billion in new loans (Farnsworth, A Dramatic Change at the IMF, New York Times, Jan. 9, 1983, at 1F and 10F).

[9] See Wriston, Banking Against Disaster, New York Times, September 14, 1982, at A27, for a strong defense of the proposition that countries do not go bankrupt. Under the system of foreign bond financing employed during the nineteenth and twentieth centuries, bond holders sustained capital losses on their books when increasing prospects for default depressed the market price. Partly for this reason settlements between bond holder committees and debtor governments typically involved some forgiveness. Sachs, LDC Debt in the 1980's: Risk and Reforms, in Crises in the Economic and Financial Structure 220 (1982), notes that: "Defaults were typically settled...on terms which rarely preserved more than a small fraction of the capital value of the original asset." The bond holders had strong incentives to negotiate a repayment schedule that was a realistic reflection of the debtor's capacity to repay. They had already sustained a capital loss based on the market's expectations of the country's repayment prospects, and negotiation of an unrealistic repayment schedule was likely to increase it. Bond holders were also in a weaker bargaining position vis-a-vis debtors in default than are commercial banks. Both banks and bond holders could deny debtors access to future credit but banks, in addition, can bar debtors from participation in the international payments system.
The cash flow may be decomposed into two components:

\[ C_t = \left( s + i_t \right) \sum_{j=t}^{N} P_j + P_t - \left[ i_t \sum_{j=t}^{N} P_j \right], \]

where \( s \) is the contractual spread on the loan, \( i_t \) is LIBOR at time \( t \), and \( P_t \) is the principal repayment scheduled at time \( t \). The first term is subject to uncertainty over whether the borrower will meet his interest and principal payments and over the level of LIBOR. The second term is subject to uncertainty over the level of LIBOR only. The bank must pay for the cost of funds even if the borrower does not make the interest payment.

[12] For a recent assessment of the data base, see Davis, Financing Third World Debt (1980).
[14] This was made quite explicit in the case of Rumania. The authorities reputedly refused to make any further payments to their bank creditors until they agreed to a rescheduling (see Farnsworth, Rumania in Talks with I.M.F., New York Times, March 8, 1982, at D1.)
[18] Bankers are keenly aware of this risk. The recent opinion survey by the Group of Thirty, supra note 1, at 4, concludes that: "Large numbers and amounts of reschedulings were seen as the main threats to the international banking system."

Jack M. Guttentag is Professor of Finance and Robert Morris Professor of Banking at the Wharton School of the University of Pennsylvania. Professor Guttentag has served as Chief of the Domestic Research Division of the Federal Reserve Bank of New York, on the senior staff of the National Bureau of Economic Research, as managing editor of the Journal of Finance, and as a director of several private financial institutions and professional societies. He is a well-known consultant and a widely published author.

Richard J. Herring is Associate Professor of Finance and Director of the Wharton Program in International Banking and Finance at the Wharton School of the University of Pennsylvania. He has also served as a consultant for the U.S. Department of the Treasury, the Council of Economic Advisers, and several international financial institutions. In addition to books and articles on topics in international finance, he has published, with Jack Guttentag, a series of articles on prudential aspects of the behavior of financial institutions: A Framework for the Analysis of Financial Disorder, in Economic Activity and Finance (Ballinger, 1981); The Insolvency of Financial Institutions: Assessment and Regulatory Disposition, in Crises in the Economic and Financial Structure (D.C. Heath, 1982); and The Lender of Last Resort Function in an International Context, Princeton Essays in International Finance (1983).